

ever, early transplant-related mortality (TRM) was similar in both groups. Besides both the frequency of acute and chronic GvHD were not affected by the intensity of conditioning regimen. In median 24.2 months (0.2-36 ms) of follow-up period, 3-year-probability of DFS and OS in RIC compared to MA were 34.7 % vs 46.9 % (log-analysis, $p=0.31$) and 61.2 % vs 47.2 % ($p=0.37$), respectively. **Conclusion:** We observed less regimen related toxicity in RIC group as expected. Although the incidence of disease relapse was more frequent in RIC group than MA group, both DFS and OS were found in similar rates in both regimen. In CML patients RIC regimen could be preferable instead of a MA regimen, in high risk transplant candidates. We have still no evidence for RIC about durable control of CML. After the completion of an ongoing prospective and randomized phase III study in CML comparing the RIC with MA in our center; we will extensively evaluate the impact of RIC at allogeneic transplantation.

Transplantation data

Variables	RIC group (n=25)	p	MA group (n=48)
Median CD34 (10e6/ BW kg) (range)	4.63 (2.49-13.16)	0.283	4.85 (0.36-18.90)
Median MNC (10e8/ BW kg) (range)	4.31 (0.98-19.15)	0.953	4.79 (0.55-19.15)
Median CD3 (10e8/ BW kg) (range)	21.70 (1.00-100.26)	0.071	25.10 (1.0-294.54)
Median Gratwohl Score (range)	2 (1-4)	0.795	2 (1-4)
Engraftment kinetics			
Neutrophil > 0.5 × 10 ⁹ /L, median days (range)	15 (0-20)	0.699	14 (10-32)
Platelet > 20 × 10 ⁹ /L, median days (range)	10 (0-15)	<0.0001*	13.5 (8-32)
Mucositis (Present/ Absent)	11/14	<0.0001*	45/3
Median grade of mucositis (range)	0 (0-3)	<0.0001	2 (0-4)
Median days of mucositis (range)	0 (0-14)	<0.0001*	7 (0-20)
Febrile episode (Present/Absent)	11/14	<0.0001*	45/3
Median incidence of febrile episode, n	0 (0-2)	<0.0001*	1 (0-3)
Median days of febrile episode (range)	0 (0-8)	0.008*	2 (0-15)
TPN use	22%	<0.0001*	77%
Acute GvHD	34.8%	0.785	29.8%
Chronic GvHD	76.2%	0.504	72.5%
Early transplant- related mortality	12.0%	0.522	20.8%
Relapse	52%	0.001*	26%
3-year- probability of DFS	34.67% ± 10.62%	0.314	46.85% ± 7.89%
3-year- probability of OS	61.24% ± 10.24%	0.367	47.19% ± 7.85%

* $p < 0.05$

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C-REACTIVE PROTEIN (CRP) MAY PREDICT TRANSPLANT-RELATED MORTALITY AFTER ALLOGENEIC HEMATOPOIETIC CELL TRANSPLANT (HCT)

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Current prognostic factors for transplant related mortality (TRM) are disease status, the presence of comorbid conditions, and performance status. Each of these measures has problems of sen-

sitivity and discriminative capacity. CRP, a marker of systemic inflammation, has shown considerable value in non-HCT setting to predict vascular events and overall survival(OS). We hypothesized that elevated CRP would predict for worse HCT outcome. Using a highly sensitive CRP assay, pre-HCT CRP levels were analyzed in 41 consecutive patients with MDS or AML who underwent HCT after a preparative regimen of fludarabine (125 mg/m² IV total), melphalan (140 mg/m² IV total) and alemtuzumab (100 mg IV total). The median age was 52 years and 11/41 had active had active disease at HCT. The median CRP level was 20.6 mg/L and the mean was 38.5 mg/L (range 0.3 to 180). Six month TRM was 23% with a median follow-up for survivors of 15 months. There was a significant association between higher pre-HCT CRP levels and TRM ($P = 0.03$). CRP levels above the median had a hazard ratio of 3.2 ($P = 0.07$). CRP also showed an association with overall survival (OS) ($P = 0.07$) of borderline statistical significance. CRP remained predictive of TRM after adjusting for disease status ($P = 0.06$), charlson comorbidity index ($P = 0.03$), kaplan-feinstein comorbidity index ($P = 0.01$), ECOG performance status ($P = 0.07$) and age over 50 ($P = 0.04$). We conclude that in HCT recipients, the independent prognostic value of CRP for TRM suggests the potential to enhance estimates of HCT outcome in addition to standard prognostic factors. Prospective studies in larger patient cohorts should be pursued to confirm the independent value of CRP and other pro-inflammatory cytokines on HCT outcome.

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THIOTEPA BASED CONDITIONING REGIMEN IN 374 PATIENTS UNDERGOING ALLOGENEIC STEM CELL TRANSPLANTS FROM RELATED OR UNRELATED DONORS

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Background: The Perugia group introduced thiotepe (THIO) in allogeneic stem cell transplants (HSCT): we have developed THIO based conditioning regimens in combination with cyclophosphamide (CY), Fludarabine (FLU), melphalan (MEL) or TBI 200 mainly for patients above the age 45.

Aim of the study: assess the outcome of patients undergoing an allogeneic HSCT with a THIO based conditioning regimen.

Patients. 374 patients were allografted with a THIO based regimen, between 1994 and 2005, from HLA identical siblings (SIB) (n=221) or family partially mismatched (n=67) or unrelated (n=86) donors. Median patient age was 48 years (range 16-67). The stem cell source was unmanipulated in all cases, either bone marrow (n=276) or peripheral blood (n=98). The conditioning regimens were classified as reduced intensity (n=177) (THIO-CY or THIO-FLU) or intensified (n=197) (THIO+CY supplemented with MEL or TBI). The disease was in 1stCR (n=221) or more advanced phase (n=153). Patients had chronic myeloproliferative disorders (n=123), acute leukemia (n=120), myelodysplasia (n=46), other (n=85, including lymphoma and myeloma). All patients received cyclosporin methotrexate GvHD prophylaxis; anti-thymocyte globulin was added for alternative donor transplants. The median follow up for surviving patients is 5 years (range 1-12 years)

Results: The overall actuarial 10 year survival is 40%, (60% vs 30% in CR1 or >CR1 disease). The cumulative incidence (CI) of transplant related mortality (TRM) at 10 years is 29% (18% vs 36% for CR1 or >CR1 disease); TRM for CR1 patients grafted from identical siblings (n=94) is 12%. Acute GvHD grade III-IV was seen in 6% of sibling HSCT and 12% of alternative donor grafts. The CI of relapse related death (RRD) at 10 years was 27% (18% vs 32% in CR1 or >CR1). There was no effect of patient age, nor of stem cell source on survival. In multivariate analysis on survival, significant predictors were disease phase (RR 2.4 of death for patients beyond CR1) and intensity of the conditioning (RR 1.66 for intensified regimens); these two variables also predicted TRM; disease phase predicted RRD.

Conclusions: This study shows that THIO based conditioning